



ROCK RAIDERS

PSX VERSION GAMES DESIGN DOCUMENT



TABLE OF CONTENTS

1)	.....	TITLE PAGE
2)	.....	TABLE OF CONTENTS
3)	.....	GLOBAL CONCEPT SUMMARY
4)	.....	THE ROCK RAIDERS UNIVERSE
5)	.....	GAME OBJECTIVE
6)	.....	EMPHASIS CHANGE FROM PC TO PSX
7)	.....	GAME ENGINE
8)		
9)	.....	GAME SCENARIOS
10)		
11)	.....	THE ROCK MONSTER CULTURE
12)	.....	THE GAME STYLE
13)	.....	GAME DIRECTION & GOALS
13)	.....	TWO PLAYER GAMES
14)	.....	EXAMPLE CONTROL METHOD FOR THE PSX
15)	.....	THE FEATURES AND ATTRIBUTES OF VEHICLES AND VEHICLES



Global Concept Summary

LEGO Rock Raiders will form the first batch of models to appear as part of the brand new LEGO Underground theme. As the theme name suggests the inspiration for LEGO Rock Raiders is an underground universe where giant machines labour in extreme conditions to mine for precious energy crystals.

LEGO Media and LEGO Play Materials have collaborated at every stage of the concept development and for the first time will deliver a synergistic package of products to the market place. This places the concept in a unique position within the LEGO Group as this is the first time in its history that there have been multiple products derived from a single concept.

Products will include LEGO Rock Raiders models, LEGO Rock Raiders PC CD-ROM game, LEGO Rock Raiders PSX game, LEGO Rock Raiders Puzzle Books and a LEGO Rock Raiders Comic Book.

The launch date of the new theme is September 1999.



The LEGO Rock Raiders Universe

Deep Space, sometime in the near future...

Spiral Galaxies, giant gas clouds and billions of stars fill the endless void. Meteorites pass by, spinning across space. The enormous geological survey ship, the LMS Explorer is making its' return journey home to LEGO World after a long expedition in deep space when it begins to encounter trouble. The vessel has entered into a giant asteroid field and the crew fight to maneuver their way safely through the perilous rocks, however the effect of the bombardment places the integrity of the shields at critical: they are running out of power. Low on power and listing badly, the LMS Explorer is consumed by a wormhole at the centre of the asteroid belt. Although badly damaged and running on emergency power the ship emerges from the wormhole intact.

The captain sets a course to orbit the nearest planet, hoping that the remaining emergency power will hold out long enough to make it there safely. Time is of the essence; the Rock Raider crew must make emergency repairs to the LMS Explorer and more importantly replenish the depleted stock of power crystals. A geological scan of the planet reveals seams of power crystals and LEGO ore, but can the sensors be trusted? The only way to find out will be to send the Rock Raider team down beneath the surface to locate and mine the precious minerals!



Game Objective

As a player your overall objective is to mine for the precious power crystals that you will need to re-energise the engines of the LMS Explorer. Power crystals are a recognised “commodity” within various LEGO Themes and children recognise and understand their value in relation to LEGO games. Within the LEGO Rock Raiders Theme we have introduced a second “commodity”; LEGO Ore. Ore is collected and refined by the Rock Raiders and used to create new buildings, vehicles and machinery.

Players will take direct control of the various vehicles offered within the game, (these remain consistent with the models available in the LEGO Rock Raiders toy range) selecting the most appropriate vehicle for a given mission objective. For example, you may require a fast and manoeuvrable vehicle like the Hoverboard or alternatively there will be times when the sturdy Loaderdozer will be required to crash through an obstacle!



Emphasis Change from PC to PSX

LEGO Media International and Data Design Interactive have changed the emphasis of the product whilst maintaining the Rock Raiders Universe and overall game objective. The PC CD-ROM features a "god" style graphic user interface and adopts a standard menu structure for accessing the various features and functions within the game.

One of the significant differences between the PC CD-ROM and the console version of the game is the player interface: rather than controlling multiple game elements via a menu style interface, players of the PSX version will take direct control of a single vehicle, adopting a more action oriented style of game.

In addition to the fundamental change in the player interface, the console version of LEGO Rock Raiders will have unique mission maps and mission objectives.

Game Engine

The game is set in a real time 3D polygon based environment. The 3D meshes that make up each of the levels can have a variety of undulations and the textures provide varying terrain types including lava, ice, water and rock, enhancing the game-play and adding a visual depth and richness. Each of the vehicles has specific physics code and will exhibit unique handling, providing a very enjoyable real time experience when controlling and manoeuvring them about the levels.



This 3D polygonal based viewpoint has been selected over the 2D sprite based engine traditionally used in games of this genre. The Sony PlayStation platform will enable us to achieve strong visual effects and game play as it has been designed purely with real time 3D in mind and has excellent additional capabilities such as lighting and sound.

Lighting Effects.

Dynamic lighting can be incorporated to enhance the look of the game.

Fog and other transparent effects will be used to further enhance the look of the game.

Animating textures will allow us to show water / lava effects to greater effect.



Sound.

We will be using XM music to enhance the atmospheric feel of the game.

We will also use XA audio to further enhance the feel of the game.

If possible we could also incorporate Surround Sound into the XM music player if the libraries allow this to be done. (There was mention that this would be the case at the last DevCon.)

The real time 3D engine and the camera AI will automatically rotate the view and provide the best visual experience for the player and eliminate the need to falsely remove near-side walls that would otherwise block views. We feel that this freedom will allow us to create a more realistic playing environment without having to make compromises to graphics or game play.

Levels will be comprised of some of the following elements :

Tunnels linking caverns together, forming labyrinth-like mazes.

Looser rock and soil walls, which can be excavated to travel from one cavern to another.

Natural obstructions such as lava flows, hazardous to anything that comes into contact with them. Cunning players will find ways to bridge seemingly impossible rivers of lava in order to reach bonus crystals!

Underground rivers. These will vary from being slightly stirring still-waters to raging torrents that only the most skillful of players will successfully overcome.

Underground lakes and pools.

Ice. The large drilling unit feels right at home on the ice with its huge heavy-grip tyres.

Various creatures that may act as obstacles to your mission include:

Underground Rock monsters, Lava monsters, Ice monsters, scabby scavengers, scorpions, snakes, spiders and bats etc. The Rock, Ice and Lava monsters evoke conflict whilst the other creatures mainly inhibit your progress.

Game Scenarios



The player will typically start in a smaller cave or cavern and will have an understanding of the particular mission objective. These will range in style and complexity and the player will build on knowledge gained in previous episodes.

Limited time will be a key motivator and will provide a significant element to the majority of the missions, adding tension and providing an arcade style feel to the gameplay. The time limiting factor can be implemented in a number of ways: forced screen scrolls caused by the movement of molten lava or rushing water where a player must escape destruction by staying ahead and reaching safe ground or by triggered events where a player must achieve specific goals before disaster such as reinforcing walls to prevent cave-ins or moving explosive equipment away from an earthquake zone before the next quake!

The current mission objectives will be established by using a combination of FMV scenes and a verbal briefing from the captain of the LMS Explorer. The briefing will be supported by a text description that can be recalled at any time during play.

Once the player has understood the objective they will be able to select an appropriate vehicle and driver for the job in hand! Certain missions may require the player to use a specific piece of equipment in order to aid the narrative flow of the game and add variety. For example a rescue mission involving the safe recovery of Rock Raiders from perilous positions around a level would almost certainly demand the use of the Tunnel Transporter rather than the Hoverboard!



LEVEL 1. MISSION OBJECTIVE:

The cargo ship has very little power left. It desperately needs power crystals to energise the life support systems. As a highly trained Rock Raider you have been chosen to be teleported down to the planet and find the ten energy crystals needed for the life support systems. The planet's magnetic storms have caused chaos with the teleportation pads so you will have to find your vehicle when you arrive. You have only 3 minutes before the all the cargo ship's energy is completed depleted.

Level Start.

The rock raider has been teleported into a cavern. He can run around freely, however the small digger is seen behind a cave wall. If the Rock raider runs to a nearby drillable cave wall and presses the 'X' button whilst moving forward, the Rock Raider starts drilling the wall. Once the wall collapses the Rock raider is able to jump into the small digger and drive. The small digger is good at digging soft soil and by driving to drillable walls and pressing 'X' it can dig through the wall. If power crystals are found during the rock fall, they fly into the air and fall on the ground moments later they teleport up to the cargo ship.

On this level, there are small spiders which do not harm they vehicle but may do some harm to the Rock Raider if they touch him.

THE ROCK MONSTER CULTURE



In addition to the hazards presented by the environment there are also a number of monsters and creatures inhabiting the underground!

The Rock Monster is perhaps the most feared of the underground creatures, huge and fierce he will easily destroy smaller vehicles and undefended buildings and will seriously hamper the efforts of even the largest of the Rock Raiders drilling machines!

THE GAME STYLE

The user must use all of these abilities to successfully negotiate the Rock Monsters hostile environment, each area of the Rock Monsters domain will get progressively harder so each ability becomes more and more essential for the player to use.

The player will be able to move freely around a 3D environment. The player will have to use the Rock Raiders abandoned vehicles to complete certain tasks (*see: puzzles, tricks & traps section*). When the player discovers a vehicle that is usable the controlled minifigure will climb inside the vehicle (*in some cases*) and the user will take control of that vehicle until they decide to get out or the task is completed.



GAME DIRECTION & GOALS

We plan to gradually unfold the Rock Raiders console game plot out over twenty or so action packed levels. Each level will introduce a few new elements from the Rock Raiders range, which are interacted with by the user. The order in which the Rock Raider items are used is dependent on the overall plot of the game. The game is different to the PC version and because of the game type we are using, the end-user can have a much more personal encounter with each of the Rock Raider vehicles and elements. Overall the character will have much more interaction with the Rock Raiders in general, and most of the challenges in the game will be solved by the player using the Rock Raiders equipment.

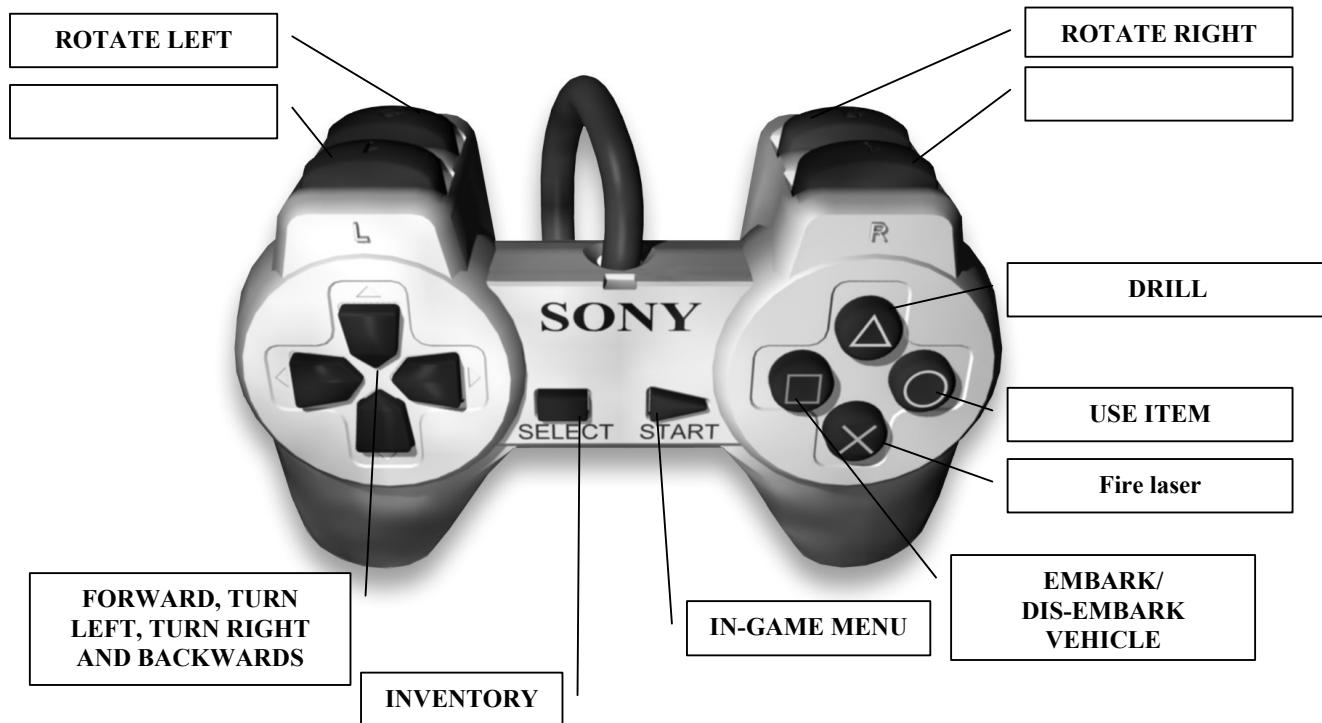
Two Player Mode

The PSX version of LEGO Rock Raiders will also include a co-operative two player mode where two players can each control a unit. The emphasis will be on the co-operative aspect of the game, for example one player may take charge of the drilling through walls aspect whilst his partner takes care of the marauding hordes of Rock monsters. This will mean that the players will have to stay fairly close together and should also minimise scrolling issues, such as both players going in different directions.

Obviously, having two players would make certain levels significantly easier, therefore to keep the same quality of gameplay, we will increase the difficulty of the objective. Examples of this will be decreasing mission times, increasing the quantity of crystals to be collected, increasing the number of enemies etc.

CONTROL METHOD

The following section shows the default playstation control pad configuration for Lego Rock Raiders (PSX). The pad will be configurable to the end-user via the options menu at any time, but if they do not wish to configure the pad the following defaults will be assigned. The game also works using the Analogue pad.



The Features and Attributes of Vehicles and Enemies

Vehicles:

Hovercraft: This can hover over most surfaces including rock, water and lava. As it is very light and hovers just one foot off the ground it is very susceptible to water waves or attack from enemies such as lava monsters.

Large Catamaran: This sails in the water and can be used to transport small vehicles such as the small truck or the small digger.

Large Mobile Laser Platform: This can lazer through soft, medium and hard rock very quickly. Should the lazer be fired upon an enemy it will give an electric shock and the enemy will run away.

Loder Dozer: This can be used to bash into rock at high speed. It can also shovel up large amounts of earth to used to fill crevices or build islands across water.

Tunnel Transporter: This can be used to transport men, crystals, ore, even a small truck or small digger. It will land, takeoff and fly under player control.

Rapid Rider: This is a small catamaran which can transport a RockRaider and a has a small storage area to carry crystals.

Small Digger: This is useful for digging soft soil and transporting crystals. It is fairly fast and can outrun most enemies.

Small Mobile Laser Platform: This has similar abilities to the large mobile laser platform, but is lighter and faster and can only drill soft and medium rock.

Small Truck: This is the fastest land based vehicle over flat land with a storage space for one crystal.

Granite Grinder: The Granite Grinder is capable of going over the bumpiest of terrain and can break cave walls by repeated ramming them and drilling creating a sort of hammer action.

Small Helicopter: This is capable of transporting only the pilot but needs fuel. It has a turbo action for very fast speed and is excellent for flying across difficult terrain e.g. water or lava. Due to it's height and turbo jets it is very difficult for the planet inhabitants to attack it in flight.

Enemies:

Rock Monster: The rock monster is a very powerful land based enemy. It can punch vehicles and buildings. It can stamp it's feet, causing earth tremors which may topple granite grinders or your Rock Raider man if he is not in a suitable vehicle.

Ice Monster: This creature has similar abilities to the Rock monster but as it is lighter in weight, it cannot cause earth tremors. It can however freeze objects in a tomb of ice with it's frosty breath. If a vehicle is encased in ice it will require fully de-frosting before being operational.

Lava Monster: This creature lives in the lava and will fire jets of lava or throw balls of lava at anything that comes close to it's domain. This is a very dangerous creature and can move through the lava very rapidly often laying in ambush for the unsuspecting victims.

Large Spiders: The large spiders are very fast insects which can spit web over short distances. They tend to ambush their prey by surrounding the prey in packs, immobilising vehicles with their sticky web.

Rock Whale: The rock whale is a large lumbering oaf like creature, which slowly walks around the level. It often stops for a sleep in the most awkward of places and can cause delays forcing the RR man to use an alternative route. This often means drilling or digging around it. However, if provoked it can attack using it's body as a battering ram.

Scabby Scavenger: This mischevious creature steals crystals and even wheels from vehicles. He usually gets bored with his booty and often will drop it nearby and goes off to find something else of interest.



Slugs: Slugs act like small battering rams. They often work in packs but due to their weight, often inflict only minimal damage on the large vehicles but can be quite devastating for small vehicles after sustaining a prolonged attack.

Scorpions, Snakes, Bats: These creatures normally only have any effect on the RR himself as they are too small to cause any damage to vehicles.